MINISTRY OF COMMUNICATIONS (SHRI P.V. RANGAYYA NAIDU): (a) The total number of temporary telephone connections sanctioned in East Delhi area from 1.4. 90 to 31.3.92 is 4400. The number if telephone connections working in this area as on date is 2240.

(b) No, Sir.

(c) and (d). Does not arise in view of reply to (b) above.

[*Translation*]

Power Through N.C.E.S.

7088. DR. P.R. GANGWAR: Will the Minister of POWER AND NON-CONVENTIONAL ENERGY SOURCE be pleased to state:

(a) the research conducted by the Government for generating power from the non-conventional energy sources like garbage and rice husk;

(b) if so, the details thereof;

(c) the total expenditure incurred so far thereon;

(d) the extent of success achieved on the research; and

(e) the steps being taken by the Governement for increasing the generation of Power?

THE MINISTER OF STATE FOR POWER AND NON-CONVENTIONAL ENERGY SOURCES (SHRI KALP NATH RAI) (a) Project have been taken up, with research and development ramifications, for genration of power from rice straw/husk and garbage.

(b) to (e). (i) A 10 MW fludised bed combusion pilot power plant using surplus rice straw as fuel has been set up at Jalkheri in Punjab. This technology development project, a jopint effort of the Department of Non-Conventional Energy Sources of Government of India, Punjab State Electricity board and Bharat Heavy Electrical Ltd., is the first project of this kind in the world. The plant has recently been test fired successfully and is exected tp become opetational during the forthcoming paddy season in November, 1992. Utilisation of surplus paddy straw for regular power generation will be considered on successful operation of this pilot plant.

(ii) A reasearch and development project at Delhi for incineration of municipal refuse and generation of 3.75 MW power, set up on turnkey basis with Danish techinical and financial assistance, did not prove successful. The totai expenditure so far incurred in regard to the above projects is about Rs. 60 crores including foreign soft loan assistance totalling about Rs. 22 crores and grant totailing about Rs. 6 crores.

(ii)Research projects on small scale power generation (15-100 KW range) from rice husk through gasification route have also been taken up at IIT Bombay, IISc., Bangaiore and Bharthidasan School of Engineering, Trichy. A 15 KW prototype gasifier system fabricated on the esign developed at IIT, Bombay has successfully worked for 1000 hrs. The outcome of other projects is awaited . The total expenditure incurred so far on these projects is approx Rs, 0.80 crores. When proved successful, efforts shall be made for commercialization of these technologies.

[*English*]

Bidhan Bag Unit of Balco

7089. SHRI HARADHAN ROY: Will the Minister of MINES be pleased to state:

(a) whether there is any proposal to improve the performance of the Bidhan Bag Unit of Balco;

(b) whether the Government are considering any proposal for modernisation and expansion of the Bidhan Bag Unit of BALCO;

(c) if so, details therepf; and

(d) if not, reasons therefor?

THE MINISTER OF STATE OF THE MINISTRY OF MINES (SHRI BALRAM SINGH YADAV): (a) to (d) Bharat Aluminium Comcpany Limited (BALCO) has inttitiated steps and commissioned a feasibility study to improve the performance of the Bidhanbag unit in a phased manner. keeping in view its economic viability and the resources of the Company As an inititai measue to improve the product mix in value added items, an all aluminium Alloy conductor Plant of 1,600 tonnes capacity per annum was installed in 1991 in place of Aluminium Conductor Steelk reinforced. The Plant is working since then. However, for want of adequate orders from the State Electricity Boards, who are the main users of the product, it has not been possible to utilise the full capacity of the plant.